

ABSTRACT OF THE DISCLOSURE

A method and computer graphics system capable of super-sampling and performing real-time convolution are disclosed. In one embodiment, the computer graphics system may comprise a graphics processor, a sample buffer, and a sample-to-pixel calculation unit. The graphics processor may be configured to generate a plurality of samples. The sample buffer, which is coupled to the graphics processor, may be configured to store the samples. The sample-to-pixel calculation unit is programmable to select a variable number of stored samples from the sample buffer to filter into an output pixel. The sample-to-pixel calculation unit performs the filter process in real-time, and may use a number of different filter types in a single frame. The sample buffer may be super-sampled, and the samples may be positioned according to a regular grid, a perturbed regular grid, or a stochastic grid.

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